

**UNITED STATES DISTRICT COURT  
EASTERN DISTRICT OF MISSOURI  
EASTERN DIVISION**

<b>AVANTE INTERNATIONAL</b>	)	
<b>TECHNOLOGY CORP.,</b>	)	
	)	
<b>Plaintiff,</b>	)	
	)	
<b>vs.</b>	)	<b>Case number 4:06cv0978 TCM</b>
	)	
<b>PREMIER ELECTION SOLUTIONS,</b>	)	
<b>INC., SEQUOIA VOTING SYSTEMS,</b>	)	
<b>and ELECTION SYSTEMS &amp;</b>	)	
<b>SOFTWARE, INC.,</b>	)	
	)	
<b>Defendants.</b>	)	

**MEMORANDUM AND ORDER**

Pending in this patent action are seven motions for summary judgment, including four that are generally applicable and three that are applicable to specific equipment. The four general motions are (1) plaintiff Avante International Technology Corporation's ("Avante") motion for summary judgment that United States Patent Numbers 6,892,944 ("the '944 patent") and 7,077,313 ("the '313 patent") are not invalid under 35 U.S.C. § 112 [Doc. 323]; (2) Diebold Election Systems' (now known as Premier Election Solutions, Inc.) and Election Systems & Software, Inc.'s ("ES&S") motion for summary judgment of non-infringement on Claims 26-28, 30, and 49-51 of the '944 patent [Doc. 332]; (3) Premier Election Solutions, Inc.'s ("Premier"), Sequoia Voting Systems' ("Sequoia"), and ES&S's motion for summary judgment of invalidity of Claims 26-28, 30, and 49-51 of the '944 patent under § 112 [Doc. 335]; and (3) all three Defendants's motion for summary judgment of invalidity of the asserted claims from the '944 patent and the '313 patent under 35 U.S.C. §§ 102 and 103

[Doc. 338]. The three specific motions are Avante's motion for summary judgment that Premier's equipment infringes its '944 and '313 patents [Doc. 321]; Avante's motion for summary judgment that ES&S's equipment infringes the two patents [Doc. 322]; and Avante's motion for summary judgment that Sequoia's equipment infringes its two patents [Doc. 365]. Also pending is a motion by Avante to strike the declarations of Peter Martin and Russell Childers and to strike Defendants' references to Premier's CTS-1/HSCC equipment. [Doc. 437]

### **Procedural Background**

This case began with Avante filing suit against the three Defendants for allegedly violating two of its patents, the '944 patent and patent number 7,036,730 ("the '730 patent"), with a total of fourteen pieces of equipment. A third patent, the '313 patent, and another piece of equipment were named in a second amended complaint. After a Markman<sup>1</sup> hearing, a claim construction order, an alternative dispute resolution conference, and rulings on motions to dismiss and motions for partial summary judgment, issues relating to the '730 patent were resolved. In the ruling on that patent, the Court noted that each of the claims at issue in the '730 patent include a "voting session identifier" and a receipt. (Mem. of 9/24/07 at 2, 7.) The Court further noted that its claim construction order construed the terms "tangible receipt," "printed receipt," and "printed paper" to mean "a reviewable printout of the voters' voting selections or choices or a corresponding voting session identifier that is retained by the voter." (*Id.* at 3.) This ability of a voter to take away the voting session

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<sup>1</sup>See Markman v. Westview Instruments, Inc., 517 U.S. 370 (1996).

identifier printed on paper retained by that voter was lacking in the equipment allegedly violating this patent, Premier's AccuVote TS and AccuVote TSX. (Id. at 7.) Consequently, this equipment did not infringe Avante's '730 patent. (Id. at 9.)

Subsequently, the parties agreed that what remain are issues relating to claims 1, 26-28 (which depend on claim 18), 31, 32, 42, and 49-51 of the '944 patent and claims 13, 14, 47, and 48 of the '313 patent.

### **Factual Background**

The '944 Patent. The '944 patent is titled "Electronic Voting Apparatus and Method for Optically Scanned Ballot." It is a "method and apparatus" invention. (See '944 patent at col. 1, ll. 20-22.) The application was filed on September 30, 2002; amended on April 29, 2004; amended again on June 1, 2004; and granted on May 17, 2005. There were also seven provisional applications<sup>2</sup> filed, the earliest on October 1, 2001, and the most recent on August 12, 2002. The inventors are Kevin Kwong-Tai Chung and Victor Jun Dong. Amerasia International Technology, Inc. – owned by Chung – is listed as the assignee.<sup>3</sup>

The Abstract<sup>4</sup> for the '944 patent reads as follows:

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<sup>2</sup>A provisional application must include "a specification as prescribed by the first paragraph of section 112 of [Title 35]," see page 17 below, and "a drawing as prescribed by section 113 of [Title 35]." 35 U.S.C. § 111(b)(1)(A) and (B). It need not include a claim. Id. § 111(b)(2). See also 37 C.F.R. § 1.51(c) (listing the necessary components of a provisional application). A later-filed nonprovisional application may claim an invention in a provisional application if certain requirements are met. See 37 C.F.R. § 1.78.

<sup>3</sup>Defendants do not challenge Avante's standing to bring suit on the '944 patent.

<sup>4</sup>A patent application must include "[a] brief abstract of the technical disclosure in the specification . . . ." 37 C.F.R. § 1.72(b). "The purpose of the abstract is to enable the United States Patent and Trademark Office and the public generally to determine quickly from a cursory inspection the nature and gist of the technical disclosure." Id. The Federal Circuit Court of Appeals has

A machine readable ballot comprises a ballot sheet having a voting identifier including a representation of election jurisdiction information and a unique ballot identifier. A plurality of contest regions each have two or more mark spaces for making voting selections. The contest regions correspond to contests in the jurisdiction represented by the election jurisdiction information, and the representation of election jurisdiction information and the mark spaces are machine readable.

The background for this patent explains that "[t]he prevalent paper ballot is an optically read or optically scanned paper ballot on which a voter marks his voting selections by darkening or otherwise marking one or more regions typically indicated by an outline . . . ." ('944 patent col. 1, ll. 54-57.) The problems with this system include the frequent necessity of requiring "a different paper ballot, i.e. a customized ballot . . . for each election and jurisdiction." (Id. at ll. 59-60.) Also, "a corresponding customized template must be provided for each different paper ballot, thereby necessitating the manual sorting of the paper ballots by voting district or precinct and the separate reading/scanning thereof for each voting district or precinct." (Id. at ll. 61-65.) "Accordingly, it would be desirable to have an apparatus and method for processing paper ballots, such as optically scanned or optically readable ballots, in a more efficient manner and preferably one suitable for use with a modern electronic (e.g. DRE) voting machine." (Id. at ll. 66-67; col. 2, ll. 1-3.)

The relevant claims of the '944 patent at issue are as follows.

Claim 1 is:

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"frequently looked to the abstract to determine the scope of the invention[]" and is "aware of no legal principle that would require [that court] to disregard that potentially helpful source of intrinsic evidence as to the meaning of the claims." **Hill-Rom Co. v. Kinetic Concepts, Inc.**, 209 F.3d 1337, 1341 n.\* (Fed. Cir. 2000).

An optical reader for reading paper ballots having a jurisdiction identifier thereon and having voting selections marked thereon, wherein the jurisdiction identifier identifies the jurisdiction or jurisdictions to which each ballot pertains, comprising:

means for imaging each paper ballot including imaging the jurisdiction identifier thereof and the voting selections marked thereon; and  
a processor for receiving the imaged jurisdiction identifier for each paper ballot for selecting a template and for recording the voting selections marked on each paper ballot in accordance with the selected template,  
whereby the voting selections marked on each paper ballot are imaged and recorded in accordance with a template corresponding to the jurisdiction identifier for that paper ballot.

Claims 26-28, 31, 32, 42, and 49-51, the remaining claims at issue in the '944 patent,

read:

**26.** The method of claim **18**<sup>5</sup> further comprising, prior to said reading and for each of a plurality of voters, producing by a voting machine of a paper ballot including voting selections made by a voter.

**27.** The method of claim **26** wherein said producing a paper ballot comprises printing the voting selections on a ballot form or printing a ballot form including the voting selections.

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<sup>5</sup>Claim **18** reads:

A method for optically reading paper ballots having a jurisdiction identifier thereon and having voting selections marked thereon, wherein the jurisdiction identifier identifies the jurisdiction or jurisdictions to which each ballot pertains, comprising:

reading the jurisdiction identifier of each paper ballot;  
selecting a template responsive to the read jurisdiction identifier for reading in accordance with the selected template the voting selections marked on each paper ballot; and  
reading the voting selections marked on each paper ballot in accordance with the selected template,  
whereby the voting selections marked on each paper ballot are read in accordance with a selected template corresponding to the jurisdiction identifier for that paper ballot.

**28.** The method of claim **26** wherein the voter makes voting selections using any of a keyboard, a touch screen, a button, a switch, voice recognition apparatus, a Braille keyboard, a pen with writing recognition interface.

**31.** A method for reading paper ballots having a jurisdiction identifier thereon and having voting selections marked thereon, wherein the jurisdiction identifier identifies the jurisdiction or jurisdictions to which each ballot pertains, comprising:

- imaging each paper ballot;
- decoding the jurisdiction identifier of the image of each paper ballot;
- selecting responsive to the decoded jurisdiction identifier a template for decoding the voting selections marked on each paper ballot; and
- decoding the voting selections marked on each paper ballot in accordance with the selected template,

whereby the voting selections marked on each paper ballot are decoded in accordance with a template corresponding to the jurisdiction identifier for that paper ballot.

**32.** The method of claim **31** wherein said selecting and said decoding the voting selections marked on each paper ballot are performed substantially contemporaneously.

**42.** A reader for reading ballots comprising:

- means for reading each ballot including imaging a jurisdiction identifier thereof and voting selections marked thereon, wherein the jurisdiction identifier identifies the jurisdiction or jurisdictions to which each ballot pertains; and
- a processor for receiving the jurisdiction identifier for each ballot for selecting a template and for recording the voting selections marked on each ballot in accordance with the selected template,

whereby the voting selections marked on each ballot are read and recorded in accordance with a template corresponding to the jurisdiction identifier for that ballot.

**49.** A method for optically reading ballots comprising:

- making voting selections using any of a keyboard, a touch screen, a button, a switch, voice recognition apparatus, a Braille keyboard, a pen with writing recognition interface;

then producing a paper ballot by printing the voting selection on a ballot form or printing a ballot form including the voting selections;  
reading said making and said producing steps for a plurality of voters, and then:  
reading or imaging each paper ballot, including reading the voting selections marked thereon; and  
processing the read or imaged paper ballot for determining the voting selections thereon in accordance with a template corresponding to a jurisdiction or jurisdictions to which the read or imaged paper ballot pertains,  
whereby the voting selections are marked on each paper ballot and are processed in accordance with the template corresponding to the jurisdiction or jurisdictions.

**50.** The method of claim **49** further comprising either:  
recording the voting selections marked on each paper ballot in accordance with template corresponding to the jurisdiction; or  
displaying the voting selections marked on each paper ballot in accordance with the template corresponding to the jurisdiction, but not recording or storing the voting selections.

**51.** The method of claim **49** wherein each paper ballot is associated with a jurisdiction and wherein said processing includes selecting the template corresponding to the jurisdiction in accordance with the jurisdiction associated with the paper ballot.

The '313' Patent. The '313 patent is titled "Electronic Voting Method for Optically Scanned Ballot." The application was filed on April 10, 2003, and was granted on July 18, 2006. The same seven provisional applications are listed as were listed for the '944 patent. The inventors are Kevin Kwong-Tai Chung, Victor Jun Dong, and Xiaoming Shi. Avante – owned by Chung – is the assignee of the patent.

The Abstract for the '313 patent reads as follows:

A method for reading ballots comprises reading/imaging each ballot transported on a transport path including reading/imaging orientation indicia and a jurisdiction identifier thereof and voting selections marked thereon; determining from the orientation indicia the orientation of each ballot;

processing the jurisdiction identifier for each ballot for selecting a template; and recoding the voting selections marked on each ballot in accordance with the selected template and the determined orientation of the ballot.

The impetus behind the patent and the problems with the prior art are the same as in the '944 patent. (See '313 patent, col.1, ll. 60-67; col. 2, ll. 1-10.)

The claims at issue in the '313' patent are:

**13.** A method for reading paper ballots comprising:

- (a) imaging each of a plurality of paper ballots transported along a transport path of an image document scanner to provide a ballot image in a pixelated or bitmapped format for each ballot;
  - (b) selecting a template for decoding voting selections marked on each paper ballot responsive to the pixelated or bitmapped format ballot image of each paper ballot;
  - (c) decoding from the pixelated or bitmapped format ballot image of each paper ballot the voting selections marked on each paper ballot in accordance with the selected template; and
  - (d) tabulating the decoded voting selections decoded from each of the paper ballots consistent with the selected template;
- whereby the voting selections marked on each paper ballot are decoded and tabulated in accordance with a selected template.

**14.** The method of claim **13** wherein the jurisdiction identifier identifies one or more of a bar code, a two-dimensional bar code, a prescribed font, optical character recognition (OCR) characters, alphanumeric characters, non-alphanumeric characters, and symbols.

**47.** A method for reading a ballot having one or more contest regions and a plurality of mark spaces thereon in which voting selections may be marked for one or more contests, each mark space being defined by an outline thereof the method comprising:

- imaging the ballot having one or more contest regions and a plurality of mark spaces thereon wherein the image of the ballot includes all of the mark spaces for the contest regions thereon and is in pixelated or bitmapped format including a plurality of pixels;
- defining for each ballot the one or more contest regions each containing a plurality of reading regions each including the outline of one mark space;
- processing the image of the ballot for decoding from the image of the ballot the defined one or more contest regions and for decoding from the image of



the ballot the plurality of reading regions including the outline of one mark space thereof; and  
for each decoded contest region:  
counting the number of light pixels and dark pixels for each reading region;  
determining from the counts of light and dark pixels for each reading region whether the mark space therein is an unmarked outline or is marked as a voting selection; and  
counting each determined marked voting selection.

**48.** The method of claim **47** wherein said determining comprises:  
determining the difference between a number of dark pixels representative of the outline of a mark space and a total of number of pixels for a reading region, and  
determining whether the counted number of dark pixels for that reading region exceeds a predetermined portion of the difference between the number of dark pixels representative of the outline of a mark space and the total number of pixels for that reading region.

Chung described in his deposition his process for applying for patents. (Defs. Ex. 7.)

If he has a concept that he considers to be "patentable," he "work[s] over a few days in [his] mind how . . . what is important," and then he puts it on paper, beginning with the claims. (Id. at 16.) He next "tr[ies] to construct some sort of drawings as related to the inventions." (Id.) He also tries, after considering the process, to put it in "some sort of flow chart." (Id.) The length of time between concept and filing of the provisional application varies according to the importance of the patent to his business. (Id. at 17.) If the patent is important, he tries to file the provisional application within a one-month period. (Id. at 16.)

Other facts relevant to the particular claims and allegedly infringing equipment are set forth below as pertinent to specific arguments.

Claim Construction. The following table lists the disputed terms in the claims at issue in the '944 patent and the Court's construction of these terms.

Claim Terms	Claims Terms Appear In <sup>6</sup>	Court's Construction
"imaging," "image," and "imaged"	1	Electronically capturing and reproducing images and data from a ballot in a pixilated or bitmapped format.
"reading," "optically reading," and "read"	1, 31, 42, and 49	Scanning, reading, or capturing data from the ballot or from the image of a ballot.
"Means for imaging each paper ballot including imaging the jurisdiction identifier thereof and the voting selections marked thereon."	1	<p><u>Function:</u> Imaging each paper ballot including imaging the jurisdiction identifier thereof and the voting selections marked thereon.</p> <p><u>Structure:</u> An optical imager/reader that images a paper ballot, including the jurisdiction identifier and the voting selections, including the technology used in (i.e., or parts of) conventional ballot readers . . . and/or conventional office equipment such as copiers, scanners, facsimile (fax) machines, and other commercial imaging and/or scanning devices . . . and the like.</p>
"Whereby the voting selections marked on each paper ballot are imaged and recorded in accordance with a template corresponding to the jurisdiction identifier for that paper ballot."	1	The voting selections on each paper ballot are imaged and the choices/selections are recorded in accordance with a selected template corresponding to the jurisdiction identifier for that paper ballot.

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<sup>6</sup>The terms might appear in other claims than those listed; for purposes of efficiency, however, only those claims at issue are listed.

"Whereby the voting selections marked on each paper ballot are read and recorded in accordance with a template corresponding to the jurisdiction identifier for that paper ballot."	42	The voting selections on each paper ballot are read and the choices/selections are recorded in accordance with a selected template corresponding to the jurisdiction identifier for that ballot.
"Prior to said reading and for each of a plurality of voters, producing by a voting machine a paper ballot including voting selections made by a voter."	26	Before the reading step, a ballot is produced with the voter's choices printed thereon. The entire process is then repeated for multiple voters.
"Printing the voting selections on a ballot form."	27 and 49	The voter's choices are printed upon a preprinted ballot.
"Means for reading each ballot including imaging a jurisdiction identifier thereof and voting selections marked thereon, wherein the jurisdiction identifier identifies the jurisdiction or jurisdictions to which each ballot pertains."	42	<p><u>Function:</u> Reading each ballot including imaging a jurisdiction identifier thereof and voting selections marked thereon, wherein the jurisdiction identifier identifies the jurisdiction or jurisdictions to which each ballot pertains.</p> <p><u>Structure:</u> An optical imager/reader that images a paper ballot, including the jurisdiction identifier and the voting selections, including the technology used in (i.e., or parts of) conventional ballot readers . . . and/or conventional office equipment such as copiers, scanners, facsimile (fax) machines, and other commercial imaging and/or scanning devices . . . and the like.</p>

The following chart relates to the '313 patent.

Claim Terms	Claims Terms Appear In	Court's Construction
"imaging," "image," or "imaged"	13, 14, and 47	Electronically capturing and recording images and data from a ballot in a pixilated or bitmapped format.
"image document scanner" or "document image scanner"	13	The document image scanner includes, but is not limited to, optical readers, commercial imaging scanners, and all or part of conventional ballot reader, (excluding non-imaging conventional ballot readers which employ sensors positioned of a fixed grid pattern) conventional office equipment such as copiers, scanners, facsimile (fax) machines, and other commercial imaging and/or scanning devices, and the like.
"pixelated or bitmapped format"	13 and 47	A collection of data elements representing the individual pixels of the ballot image such that the darkness of each pixel may be determined. The images are typically stored in formats such as .BMP, or .TIFF, or other bitmapped format.
"ballot image," "image of the ballot," "image of each paper ballot," "image thereof"	13, 14, and 47	An electronic representation of all or a portion of a paper ballot, including a representation of the jurisdiction identifier and at least one voting selection, which representation is stored in a pixilated or bitmapped format.
"pixels"	47 and 48	Ballot image data elements.

The Accused Devices. Avante chose to name three defendants in this patent infringement action, each with its own equipment. This choice has resulted in a maze and multiplicity of issues and allegations.

The allegedly infringing equipment of Premier is the AccuVote TS, the AccuVote TSX, the AccuVote OS, and the Digital Ballot Tabulator. (3rd Am. Compl. ¶ 25.) The allegedly infringing equipment of Sequoia is the AVC Edge, the VeriVote Printer, the AVC Advantage, the Optical Scan 400C, and the Optech Insight. (Id. ¶ 28.) The allegedly infringing equipment of ES&S is the iVotronic, the iVotronic LS, Real Time Audit Log, Model 100 Precinct Ballot Counter, and the Model 650 Central Ballot Counter. (Id. ¶ 31.)

### **Discussion**

Standard for Summary Judgment. Although the law of the Federal Circuit Court of Appeals governs the "issues of substantive patent law and certain procedural issues pertaining to patent law," **Invitrogen Corp. v. Biocrest Mfg., L.P.**, 424 F.3d 1374, 1378-79 (Fed. Cir. 2005), the grant or denial of summary judgment is governed by the law of the Eighth Circuit Court of Appeals, see **MicroStrategy, Inc. v. Business Objects, S.A.**, 429 F.3d 1344, 1349 (Fed. Cir. 2005).

The Eighth Circuit has held that "Rule 56(c) [of the Federal Rules of Civil Procedure] 'mandates the entry of summary judgment, after adequate time for discovery and upon motion, against a party who fails to make a showing sufficient to establish the existence of an element essential to that party's case, and on which that party will bear the burden of proof at trial.'" **Erenberg v. Methodist Hosp.**, 357 F.3d 787, 791 (8th Cir. 2004) (quoting **Celotex Corp. v. Catrett**, 477 U.S. 317, 322 (1986)). When ruling on a motion for summary

judgment, "[t]he court must simply determine whether there exists a genuine issue for trial, i.e., whether there is sufficient evidence favoring the non-moving party for a jury to return a verdict in her favor." **Buboltz v. Residential Advantages, Inc.**, 523 F.3d 864, 870-71 (8th Cir. 2008). "The court must not weigh evidence or make credibility determinations, as those are functions for the jury." **Id.** Moreover, the facts must be viewed in the light most favorable to the nonmoving party and that party must be given the benefit of all reasonable inferences that can be drawn from the facts. **Matsushita Elec. Indus. Co. v. Zenith Radio Corp.**, 475 U.S. 574, 587 (1986).

In its motion to strike the declarations of Peter Martin and Russell Childers and to strike Defendants' CTS-1/HSCC<sup>7</sup> references pursuant to Federal Rules of Civil Procedure 12(f) and 37(c)(1) [Doc. 437], Avante contends that the declarations should be stricken because (1) the equipment, the CTS-1/HSCC, was not timely disclosed and (2) the declarants cannot confirm that anyone other than Premier knew that the CTS-1 was used or publicly available and witnesses who could confirm the use of the CTS-1/HSCC system were never disclosed.

The law of the Eighth Circuit applies to Avante's motion to strike. See **Maytag Corp. v. Electrolux Home Products, Inc.**, 448 F.Supp.2d 1034, 1062 (N.D. Ia. 2006).

Rule 12(f) authorizes a court to "strike from *a pleading* an insufficient defense or any redundant, immaterial, impertinent, or scandalous matter." Fed.R.Civ.P. 12(f) (emphasis added). "Rule 12(f) by its terms, applies only to pleadings, not to motions for summary

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<sup>7</sup>"CTS" is an abbreviation for "Central Tally System"; "HSCC" is an abbreviation for "High Speed Central Count."

judgment, or the documents filed in support of a motion for summary judgment." **Brannon v. Luco Mop Co.**, No. 4:05CV01713 ERW, 2007 WL 172374, \*1 (E.D. Mo. Jan. 18, 2007). But see **Nationwide Ins. Co. v. Central Mo. Elec. Co-op.**, 278 F.3d 742, 748 (8th Cir. 2001) (reviewing, without discussing applicability of Rule 12(f), 12(f) motion to strike affidavit submitted in support of motion for summary judgment). The evidence in Martin's and Childers's declarations may be excluded, however, under the provision in Rule 37(c) that if "a party fails to provide information or identify a witness as required by Rule 26(a) or (e), the party is not allowed to use that information or witness . . . unless the failure was substantially justified or is harmless." Fed.R.Civ.P. 37(c). Assuming, without deciding, that the alleged failure of Premier to timely disclose the CTS-1/HSCC system and its use in Sacramento was not substantially justified, the Court finds that it is nonetheless harmless. The information was disclosed, and the question whether the use was in a "public referendum" conducted by the Sacramento Public Works Agency or in an "election" conducted by the County of Sacramento has been vigorously argued and briefed by all parties. Moreover, Avante's argument that the disclosure was not forthright because it was made in 200 out of 700,000 pages is weakened by (a) Avante's ability to thoroughly address the merits of the question and (b) Avante's own contribution to the volume of paper submitted by choosing to name three corporations as defendants, three patents, and fourteen accused devices. And, the Court will disregard those portions, if any, of the declarations of Martin and Childers that are not supported by admissible evidence. See **Maytag Corp.**, 448 F.Supp.2d at 1062.

Accordingly, Avante's motion to strike will be denied.

Issues of Validity and Invalidity. The parties' opposing positions on the validity of Avante's '944 and '313 patents must be evaluated under the presumption of validity accorded a patent under 35 U.S.C. § 282. "A patent shall be presumed valid. Each claim of a patent (whether in independent, dependent, or multiple dependent form) shall be presumed valid independently of the validity of other claims; dependent or multiple dependent claims shall be presumed valid even though dependent upon an invalid claim." 35 U.S.C. § 282. "The burden of establishing invalidity of a patent or any claim thereof shall rest on the person asserting such invalidity." Id. This burden must be carried by clear and convincing evidence. **Minn. Mining & Mfg. Co. v. Chemque, Inc.**, 303 F.3d 1294, 1301 (Fed. Cir. 2002); **Al-Site Corp. v. VIS Int'l, Inc.**, 174 F.3d 1308, 1323 (Fed. Cir. 1999).

Avante moves for summary judgment on the question of the validity of its '944 and '313 patents for satisfying the written description requirement of 35 U.S.C. § 112. Defendants oppose this motion and counter with a motion for summary judgment that the asserted claims in the '944 patent do not satisfy § 112.

"The written description requirement derives from 35 U.S.C. § 112, ¶ 1, which states:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same, and shall set forth the best mode contemplated by the inventor of carrying out his invention."

**Space Systems/Loral, Inc. v. Lockheed Martin Corp.**, 405 F.3d 985, 987 (Fed. Cir. 2005).

This provision includes three separate requirements: the specification must (1) "'contain a written description of the invention"; (b) "'contain a written description . . . of the manner



and process of making and using it [i.e., the invention], in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same"; and (3) "set forth the best mode contemplated by the inventor of carrying out his invention." **Univ. of Rochester v. G.D. Searle & Co, Inc.**, 358 F.3d 916, 921 (Fed. Cir. 2004) (quoting § 112) (alterations in original). These "three requirements are referred to as the 'written description requirement,' the 'enablement requirement,' and the 'best mode requirement,' respectively." **Id.**

"The purpose of the written description requirement is to prevent an applicant from later asserting that he invented that which he did not; the applicant for a patent is therefore required to recount his invention in such detail that his future claims can be determined to be encompassed within his original creation." **Pandrol USA, LP v. Airboss Ry. Products, Inc.**, 424 F.3d 1161, 1165 (Fed. Cir. 2005) (internal quotations omitted). The inventor must show that he "possessed the invention at the time of that original disclosure." **Id.** "The written description requirement thus satisfies the policy premises of the law, whereby the inventor's technical/scientific advance is added to the body of knowledge, as consideration for the grant of patent exclusivity." **Capon v. Eshbar**, 418 F.3d 1349, 1357 (Fed. Cir. 2005). Accord **Univ. of Rochester**, 358 F.3d at 922. It is not required, however, that every detail of the invention be spelled out in the specification. **Falko-Gunter Falkner v. Inglis**, 448 F.3d 1357, 1366 (Fed. Cir. 2006). Accord **Kao Corp. v. Unilever U.S., Inc.**, 441 F.3d 963, 968 (Fed. Cir. 2006). "[O]nly enough must be included to convince a person of skill in the art that the inventor possessed the invention and to enable such a person to make and

use the invention without undue experimentation." **Falko-Gunter Falkner**, 448 F.3d at 1366. Accord **Kao Corp.**, 441 F.3d at 1366; **Pandrol USA, LP**, 424 F.3d at 1165. "[G]eneralized language[, however,] may not suffice if it does not convey the detailed identity of the subject matter purportedly described." **Univ. of Rochester**, 358 F.3d at 923. See also **Capon**, 418 F.3d at 1357 ("The descriptive text needed to meet [the written description] requirement[] varies with the nature and scope of the invention at issue, and with the scientific and technologic knowledge already in existence."). Claims broader than the disclosures in a patent application are not allowable. **Univ. of Rochester**, 358 F.3d at 923. "[A] patent is not a hunting license. It is not a reward for the search, but compensation for its successful conclusion." **Id.** at 930 n.10 (quoting **Brenner v. Manson**, 383 U.S. 519, 536 (1966)).

This written description requirement serves to "prevent[] applicants from using the amendment process to update their disclosures (claims or specifications) during their pendency before the patent office. Otherwise applicants could add new matter to their disclosures and date them back to their original filing date, thus defeating an accurate accounting of the priority of invention." **Chiron Corp. v. Genentech, Inc.**, 363 F.3d 1247, 1255 (Fed. Cir. 2004). Thus, when as in the case of the '944 patent, "the applicant adds a claim or otherwise amends his specification after the original filing date . . . the new claims or other added material must find support in the original specification." **TurboCare Div. of Demag Delaval Turbomachinery Corp. v. Gen. Elec. Co.**, 264 F.3d 1111, 1118 (Fed. Cir. 2001). See also 35 U.S.C. § 132(a).

Additionally, "compliance with the written description requirement is a question of fact." **Pandrol USA, LP**, 424 F.3d at 1164.

Defendants contend that Avante's '944 and '730 patents,<sup>8</sup> "alone or in combination," lack a written description for the limitation (1) in claim 26 of "the step of 'producing by a voting machine a paper ballot including voting selections made by a voter"; (2) in claims 27, 30, and 49 of "the step of 'printing the voting selections on a ballot form"; (3) in claims 27, 30, and 49 of "the step of 'printing a ballot form including the voting selections"; (4) in claims 30 and 50 of "the step of 'displaying the voting selections marked on a ballot/paper ballot"; and (5) in claims 30 and 49 of "the coordination of steps required by the step of repeating and making and producing steps for a plurality of the voters, and then[. . .] ." (Doc. 394 at 18.) The claims at issue were added in a supplemental application filed on June 1, 2004. (See Doc. 388 at Ex. F; Doc. 335 at Ex. E.) Avante counters that these claims find support in the specifications of the '944 and '730 patents.

The Court disagrees.

The specifications for the '944 patent are consistent with the Abstract, see note 4, above, and do not support the disputed claims' description of the printing or display of a ballot form with a voter's selections marked thereon. This omission is evident in the written description for Figure 6. Figure 6 is described as a "schematic block diagram of an example voting apparatus VM . . . ." ('944 patent col. 8, ll. 5-6.) "Voting machine VM includes a processor P for processing information relative to a voter and/or voting and for providing a

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<sup>8</sup>The '944 patent incorporates the '730 patent by reference.

voting session identifier, a non-volatile memory M for storing and for providing such information, a display unit DU for displaying information to the voter, and a voter interface VI whereby the voter can enter information into VM for processor P and/or memory M." (Id. at ll. 8-14.) "It is noted that the components of a personal computer and so a conventional personal computer, with or without modification, may be utilized in voting machine VM . . . ." (Id. at ll. 14-17.) Memory may be of "any suitable non-volatile memory type[,]" including "floppy disks, computer hard disk drives . . . memory cards, . . . non-volatile, random access memory . . . and the like." (Id. at ll. 30-39.) The specifications further provide that:

For optical ballot voting, voting machine VM generates a ballot format 100 for a particular jurisdiction, for example, according to a pre-programmed ballot information and/or in response to the voting jurisdiction information corresponding to the voter's VID number (fields 381-386) as entered via voter interface VI and/or a smart card and reader RW, as the case may be. The ballot format is generated by processor P . . . with a formal layout for contests 110 consistent with local election requirements rather than as a series of voting screens. Ballot 100 so generated is printed by printer<sup>9</sup> LP and is provided to the voter, e.g., by hand for provisional voting and/or by mail for absentee voting. Ballots 100 may be printed in advance of an election and/or may be printed during an election on a demand, i.e., as needed, basis.

(Id. at col. 10, ll. 21-36.) The description of Figure 10, "a schematic flow diagram of an example voting process," provides that: "Voters vote 514 by marking the mark spaces on the ballot corresponding to their desired voting selections (votes) and submit their ballots in accordance with applicable election procedure. A voter may *copy* 516 his marked ballot for later checking that his vote was counted and counted properly." (Id. at col. 17, ll. 59-64.)

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<sup>9</sup>In the context of the '730 patent, the Court construed the term printer as "[a] printer that retains no record of the data printed . . . ." (Mem. and Order of 8/20/07 at 23.)

In support of its argument that the asserted claims are not invalid under § 112, Avante submits a declaration by Dr. Jaswinder Pal Singh. Dr. Singh has a Ph.D. in electrical engineering from Stanford University and is on the faculty at Princeton University. (Doc. 394 Ex. 2 at 8-9.) He views himself as someone skilled in the art of electronic voting machines "because they are applications of computing" and he "know[s] computers." (Id. at 53, 97, 99.)

In one of his five declarations, Dr. Singh declares that "[t]he '944 patent teaches the ability to print ballots." (Doc. 388 ¶ 8.) Dr. Singh specifically cites as an example of this ability the following statement in the description of Figure 6: "Local printer LP may provide a tangible independent record of each individual voter's voting selections associated with the voter's unique identifying number and/or may be utilized to print ballots 100." (Id. (quoting col. 11, ll. 6-9)). Column 11 further states, "Desirably, printer LP also prints information identifying the election district, the date and time of voting and similar information that may help to authenticate printed receipt PR and/or optical ballot." (Col. 11, ll. 19-24.) At one point in his deposition, Dr. Singh testified that a ballot and receipt are different things. (Doc. 394 at 150-51.) He also testified that support for the claims of printing a ballot form with the voting selections could be found in three columns describing Figure 6. (Id. at 151.) Asked for a specific citation, Dr. Singh clarified that he was not saying that the ability to print the ballot form with voting selections was explicitly stated, but that one who was skilled in the art would understand that the inventors were in possession of such invention.

"One shows that one is 'in possession' of *the invention* by describing *the invention*, with all its claimed limitations, not that which makes it obvious." **Lockwood v. Am.**

**Airlines, Inc.**, 107 F.3d 1565, 1572 (Fed. Cir. 1997). "One does that by such descriptive means as words, structures, figures, diagrams, formulas, etc., that fully set forth the claimed invention." **Id.** The '944 patent may teach the ability to print ballots – indeed, the specifications refer to the printing of ballots for absentee voting or provisional voting – but what is at issue is the ability to simultaneously print or display the ballot form with a voter's selections marked thereon. Figure 6 does not support this ability. Figure 6 is a diagram of a voting machine. Figure 1 illustrates a ballot 100. Dr. Singh testified that in this context the ballot is unmarked. (Doc. 394 at 131.) The local printer referred to in the statement cited by Dr. Singh is later described as "provid[ing] a tangible independent record of each individual voter's voting selections associated with the voter's unique identifying number and/or may be utilized to print ballots 100." (Col. 11, ll. 6-9.) The specifications earlier explained that ballots may be printed before or during an election and may be provided to the voter to vote by hand for provisional voting and/or by mail for absentee voting. (Col. 10, ll. 31-36.)

There is nothing in the specifications to support the claims of printing or producing a ballot form with the voter's selections marked thereon. Dr. Singh's testimony that one skilled in the art would understand that an inventor was in possession of such invention is clearly based on his position that the common use of computers, and personal computers specifically, make such an ability natural.<sup>10</sup> (See e.g. Doc. 394, Singh Dep., at 155 ("The

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<sup>10</sup>As noted below, Dr. Singh testified in his deposition that an ordinary computer and printer could print a ballot form for an election certified in the United States. (Doc. 394 Ex. 2 at 111.)

printer prints the date and time of voting as well. You put those things together, it is very clear to one skilled in the art that – of ordinary skill in the art that this printer is capable of printing voting selections on a ballot given that it prints the date and time of voting, it can print a ballot, and it can print the voting selections. There's no reason to believe that it would not be able to do that and that that idea was not in the inventor's possession.")).

Dr. Singh also declares that the '944 patent "teaches the use of optical scanning methods in conjunction with other types of voting machines." (Doc. 388 ¶ 9.) For instance, "[c]olumn 2, line 55 to column 3, line 2 reads, 'The arrangement of the present application operates in conjunction with an electronic voting machine, also referred to as an electronic voting apparatus and/or as a direct recording electronic (DRE) voting apparatus.'" (*Id.*) Dr. Singh then states that "[i]t would appear to me that a natural way to utilize a voting machine/DRE in conjunction with scanning equipment would be for that voting machine/DRE to provide a ballot or printed paper that can be scanned." (*Id.*) That may be a "natural way," but elsewhere in the specifications it is made clear that the ballots printed are not those that have been marked by a voter. See, e.g., Col. 10, ll. 31-36. Moreover, "[t]he question is not whether a claimed invention is an obvious variant of that which is disclosed in the specification." **Gen. Elec. Co.**, 264 F.3d at 1119 (quoting Lockwood, 107 F.3d at 1572).

Avante also argues that the asserted claims in its '313 patent satisfy the written description requirement of § 112. For instance, claim 13 "has nearly the identical 'printing' claim limitation [in the italicized phrase] that appears in the '944 patent claims 26-28, 30, and 49-51." (Avante Mem. Doc. 323 at 31.) The Court has found that the asserted claims in the

'944 patent do not satisfy the written description requirement of § 112, ¶ 1. Consequently, Avante will be denied summary judgment on its claims that the '313 patent satisfy the written description requirement. Defendants have not moved for summary judgment on the '313 patent in the context of § 112, ¶ 1.

In further support of its motion arguing that its '944 and '313 patents are not invalid, Avante notes that the United States Patent Office Examiner ("the Examiner") rejected Defendants' arguments to the contrary. Specifically, the Examiner determined that claims 26-28, 30, and 49-51 in the '944 patent are supported by the specifications.

"[T]he decision of the Patent and Trademark Office with respect to patentability is accorded deference in district court litigation, deference that takes the form of the presumption of validity that is accorded to issued patents under 35 U.S.C. § 282." **Purdue Pharma L.P.**, 230 F.3d at 1329 (alteration added). For the reasons set forth above, the Court has found that Avante is no longer entitled to that presumption of validity in that the asserted claims of the '944 patent do not satisfy the written description requirement of § 112, ¶ 1.

**Prior Art.** Avante also argues that its '944 patent and '313 patent are not invalid based on any prior art. Again, in an opposing motion for summary judgment, Defendants disagree. The issues are (1) whether Defendants' alleged prior art "images" as that term is used in the asserted claims and (2) whether there was a public use of Premier's CTS-1/HSCC equipment.

"Anticipation under 35 U.S.C. § 102 means lack of novelty, and is a question of fact. To anticipate, every element and limitation of the claimed invention must be found in a single prior art reference, arranged as in the claim." **Brown v. 3M**, 265 F.3d 1349, 1351



(Fed. Cir. 2001). Accord Chemque, Inc., 303 F.3d at 1301. "That which infringes if later anticipates if earlier." Brown, 265 F.3d at 1352 (internal quotations omitted).

Section 102(a) requires as a condition of patentability that the invention not be (i) known or (ii) used "by others . . . ." 35 U.S.C. § 102(a). "For prior art to anticipate under . . . § 102(a) because it is 'known,' the knowledge must be publicly accessible." Chemque, Inc., 303 F.3d at 1301. In other words, "a person can not patent what was already known to others." Woodland Trust v. Flowertree Nursery, Inc., 148 F.3d 1368, 1370 (Fed. Cir. 1998). Similarly, "[f]or prior art to anticipate because it has been 'used,' the use must be accessible to the public." Chemque, Inc., 303 F.3d at 1301. "If the invention was known to or used by others in this country before the date of the patentee's invention, the later inventor has not contributed to the store of knowledge, and has no entitlement to a patent." Woodland Trust, 148 F.3d at 1370. "In addition, the disclosure must be sufficient to enable one with ordinary skill in the art to practice the invention." Chemque, Inc., 303 F.3d at 1306. "[P]rior use must be proven by clear and convincing evidence." Id.

Also, § 102(b) provides a defense to an infringement claim if the invention was "in public use or on sale in the country[] more than one year prior to the date of the application for patent in the United States."<sup>11</sup> 35 U.S.C. § 102(b). Public use under this section

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<sup>11</sup>Also, 35 U.S.C. § 282(4) authorizes an allegedly infringing party to assert as a defense "[a]ny . . . fact or act made a defense by this title." (Alterations added.) Title 35 U.S.C. § 102(g) makes prior art a defense to an infringement claim. Section § 102(g) provides, in relevant part:

A person shall be entitled to a patent unless . . .

(g) . . . before such person's invention thereof, the invention was made in this country by another inventor who had not abandoned, suppressed, or concealed it. In determining priority of invention under this subsection, there shall be considered not

"includes any use of the claimed invention by a person other than the inventor who is under no limitation, restriction or obligation of secrecy to the inventor." **Chemque, Inc.**, 303 F.3d at 1301. **Accord Motionless Keyboard Co. v. Microsoft Corp.**, 486 F.3d 1376, 1384 (Fed. Cir. 2007). "Although 'public use' for purposes of § 102(b) is defined differently from 'use' for purposes of § 102(a), both require actual use by someone at some point." **Chemque, Inc.**, 303 F.3d at 1307. Public use need not be accompanied by a commercial advantage. **Motionless Keyboard Co.**, 486 F.3d at 1384.

The terms "imaging," "image," and "imaged" appear in claim 1 of the '944 patent and in claims 13, 14, and 47 of the '313 patent. When construing these three terms, the Court noted that "there is support for the use of the term 'capturing' in the context of imaging and the ballot reader and for the need of an electronic reproduction of the ballot." (Mem. of 8/20/07 at 35.) The Court then construed the three terms as "[e]lectronically capturing and reproducing images and data from a ballot in a pixilated or bitmapped format." (*Id.* at 36, 45.)

Avante argues that Defendants' alleged prior art does not "image" as that term has been construed by the Court. Specifically, ES&S's M100 does not retain an image of the ballot; Sequoia's equipment cannot reproduce or record images of a ballot in a pixilated or bitmapped format; and Premier's AccuVote OS does not reproduce or record images or display the actual imaged ballot, rather the AccuVote OS displays and records how it

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only the respective dates of conception and reduction to practice of the invention, but also the reasonable diligence of one who was first to conceive and last to reduce to practice, from a time prior to conception by the other.

interprets data. If the prior art does not capture and reproduce, which Defendants' prior art allegedly does not, it does not "image" and lacks at least one limitation in claims 1, 30-32, 42, and 49-51 of the '944 patent and in claims 13-14 and 47-48 of the '313 patent. Defendants counter that Avante's construction of the term "image" requires a "display" – a requirement not included in the Court's construction of the term. Defendants further argue that the AccuVote OS and M100 each image. They (a) capture an electronic representation of a portion of a ballot in a pixilated or bitmapped format and (b) retain a copy of that representation in its random access memory ("RAM") during the processing of the ballot. Sequoia's equipment scans a ballot, decodes the jurisdiction identifier printed on each ballot, selects a template, and then records and tabulates the votes marked on a ballot. In support of their position that these capacities presage the claims at issue, Defendants cite the Court's resolution of the parties' dispute whether it is the entire ballot or only portions thereof that must be imaged when construing the terms "ballot image," "image of the ballot," "image of each paper ballot," and "image thereof." The Court concluded that these terms meant "[a]n electronic representation of all or a portion of a paper ballot, including a representation of the jurisdiction identifier and at least one voting selection, which representation is stored in a pixilated or bitmapped format." (Mem. at 49.)

Avante has submitted evidence that the cited prior art does not image as that term has been construed. Defendants counter with evidence that it has. There remains a factual dispute precluding the granting of summary judgment.<sup>12</sup>

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<sup>12</sup>Defendants also cite several patents that were disclosed in the '944 patent as prior art, e.g., the McClure patent, no. 6,250,548, and the McDermott patent, No. 2002/0072961, and were not disclosed, e.g., the McMillin patent, the Barnettler patent, the Lane Poor patent, and the Cummings

Also at issue as prior art is Premier's CTS-1/HSCC equipment. Premier argues that CTS-1/HSCC "images" as that term has been construed by the Court; i.e, it displays the ballot in a viewable format, determines whether voting selections are present, tabulates the votes, and saves the ballot images in a form that can later be reviewed by election officials. Avante contends that there has been no public use of the CTS-1/HSCC equipment and that the use made of it was unsuccessful, e.g., the scanner used with equipment could not run ten ballots without error and, therefore, could not have been certified. Premier counters that its CTS-1, or HSCC, was in use prior to the first provisional '944 patent application being filed on October 1, 2001. Specifically, it had been publicly demonstrated in January 2001 in the State of Washington, had been used in August 2001 pursuant to a contract with the Public Works Agency for the County of Sacramento, and its technical functionality satisfied the limitations of the claims at issue. Citing, *inter alia*, the deposition testimony of Talbot Iredale in June 2007 that the CTS-1 system was not being offered for sale because it was not reliable and that the system had not been replaced yet but would be by CTS-2 (Doc. 330, Ex. I, at 58-59), Avante argues that Premier's CTS-1 was a prototype, never worked, and was discontinued because it was unreliable.

"Consideration of public use includes analysis of, *inter alia*, the nature of and public access to activities involving the invention; confidentiality obligations imposed upon observers; commercial exploitation; and the circumstances surrounding testing and

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patent. The Court finds that there remains a genuine issue of material fact as to whether these patents teach systems or functions that are consistent with the Court's construction of the pertinent claims. See Al-Site Corp., 174 F.3d at 1323 (noting that the presumption that the Examiner did his duty and knew what claims is especially difficult to overcome when the prior art was before him or her during the prosecution of the patent application).

experimentation." **Am. Seating Co. v. USSC Group, Inc.**, 514 F.3d 1262, 1267 (Fed. Cir. 2008). "[U]se of an invention by the inventor himself, or of any person under his direction, by way of experiment, and in order to bring the invention to perfection, has never been regarded as such a use." **Id.** (quoting **City of Elizabeth v. Am. Nicholson Pavement Co.**, 97 U.S. 126, 134 (1877)). Accordingly, revealing a prototype to a select group of individuals without a written confidentiality agreement is not dispositive of the question of public use. **Id.** at 1268. Under certain circumstances, such an agreement can be implied. **Id.**

In the instant case, there is evidence of two uses of the CTS-1/HSCC at the relevant times. There is also evidence that the first use was only a demonstration and the second was not a public use as required for an invalidity determination under § 102. Accordingly, summary judgment is improper.

**Obviousness.** Title 35 U.S.C. § 103 provides, in relevant part: "(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. . . ." "A determination of obviousness under 35 U.S.C. § 103 is a legal conclusion involving factual inquiries." **Lockwood**, 107 F.3d at 1570. **Accord In re Translogic Tech., Inc.**, 504 F.3d 1249, 1256 (Fed. Cir. 2007); **Pandrol USA, LP**, 424 F.3d at 1165. The factual inquiries include "the scope and content of the prior art, the level of ordinary skill in the art at the time of the invention, objective evidence of nonobviousness,

and differences between the prior art and the claimed subject matter." **In re ICON Health and Fitness, Inc.**, 496 F.3d 1374, 1378 (Fed. Cir. 2007).

Additionally, "[t]he person alleging invalidity [based on obviousness under § 103] must show prior art references which alone or combined with other references would have rendered the invention obvious to one of ordinary skill in the art at the time of invention." **A1-Site Corp.**, 174 F.3d at 1323. "If a person of ordinary skill can implement a predictable variation, § 103 likely bars its patentability." **KSR Int'l, Co. v. Teleflex, Inc.**, 127 S.Ct. 1727, 1740 (2007). However, "a patent composed of several elements is not proved obvious merely by demonstrating that each of its elements was, independently, known in the prior art." **Id.** at 1741. "Under the correct analysis, any need or problem known in the field of endeavor at the time of invention and addressed by the patent can provide a reason for combining the elements in the manner claimed." **Id.** at 1742.

Citing Mr. Chung's lack of experience in the electronic voting industry before 2000, Defendants argue that the asserted claims in the '944 and '313 patents are but a common sense use of known technologies and merely rearrange what is obvious. This position finds some support in the testimony of Avante's witness, Dr. Singh, that an ordinary computer and printer could print a ballot form for an election certified in the United States (Doc. 394 Ex. 2 at 111) and that his expertise in computers qualified him as an expert in the instant case and in the background and invention process of Dr. Chung.

As with Defendants' § 102 arguments, however, the Court finds that a genuine issue of material fact remains as to whether the asserted claims of the '944 and '313 patents are invalid under § 103.

### Conclusion

For the foregoing reasons, the Court finds that the asserted claims of the '944 patent fail to satisfy the written description requirement of 35 U.S.C. § 112, ¶ 1, and are invalid. Because the Court finds that these asserted claims are invalid, the Court declines to reach the issues presented by Premier's and ESS's arguments that their use of the AutoMark™ device in conjunction with the accused optical scanning products does not infringe the asserted claims. This motion will be denied without prejudice. The motions of Avante directed to equipment that is not at issue will also be denied without prejudice.

Finally, Defendants have failed to carry their burden of showing that they are entitled to summary judgment on their arguments that the asserted claims of both the '944 and '313 patents are invalid under 35 U.S.C. § 102 based on prior art and under 35 U.S.C. § 103 based on obviousness. Their motion asking for such will be denied. Accordingly,

**IT IS HEREBY ORDERED** that the motion to strike of Avante International Technology Corporation is **DENIED**. [Doc. 437]

**IT IS FURTHER ORDERED** that the motion of Elections Systems & Software, Inc., and Premier Election Solutions, Inc., for summary judgment that the AutoMark™ device in conjunction with the accused optical scanning products does not infringe the asserted claims of U.S. Patent No. 6,892,944 is **DENIED** without prejudice. [Doc. 332]

**IT IS FURTHER ORDERED** that the motion of defendants Premier Election Solutions, Inc.; Sequoia Voting Systems; and Election Systems & Software, Inc., for summary judgment that claims 26-28, 30, and 49-51 of U.S. Patent No. 6,892,944 are invalid for lack of a written description under 35 U.S.C. § 112, ¶ 1 is **GRANTED**. [Doc. 335]

**IT IS FURTHER ORDERED** that the motion of Avante International Technology Corporation for summary judgment that U.S. Patent Nos. 6,892,944 and 7,077,313 are not invalid in view of Defendants' references and 15 U.S.C. § 112 arguments is **DENIED**. [Doc. 323]

**IT IS FURTHER ORDERED** that the motion of defendants Premier Election Solutions, Inc.; Sequoia Voting Systems; and Election Systems & Software, Inc., for summary judgment of invalidity of the asserted claims from U.S. Patent Nos. 6,892,944 and 7,077,313 is **DENIED**. [Doc. 338]

**IT IS FURTHER ORDERED** that the motion of defendants Premier Election Solutions, Inc.; Sequoia Voting Systems; and Election Systems & Software, Inc., for leave to file a joint response to the surreply of Avante International Technology Corporation is **GRANTED**. [Doc. 455]

**IT IS FURTHER ORDERED** that the motions of Avante International Technology Corporation that Premier Elections Solutions, Inc.'s equipment infringes U.S. Patent Nos. 6,892,944 and 7,077,313 [Doc. 321], that Election Systems & Software, Inc.'s equipment infringes U.S. Patent Nos. 6,892,944 and 7,077,313 [Doc. 322], and that Sequoia Voting Systems, Inc.'s equipment infringes U.S. Patent Nos. 6,892,944 and 7,077,313 [Doc. 365] are each **DENIED** without prejudice.<sup>13</sup>

**IT IS FURTHER ORDERED** that the motion of Election Systems and Software, Inc., for leave to file a surreply to Document 322 is **DENIED** as moot. [Doc. 461]

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<sup>13</sup>Each of these motions concern equipment that was first the subject of Avante's proposed fourth amended complaint. Avante was not granted leave to file this complaint.



**IT IS FINALLY ORDERED** that the parties are to file, within fifteen days of the date of this Memorandum and Order, a joint statement outlining what issues, if any, remain pending before the Court.

/s/ Thomas C. Mummert, III  
THOMAS C. MUMMERT, III  
UNITED STATES MAGISTRATE JUDGE

Dated this 16th day of July, 2008.